X-1355-1 US PATENT

DAC BASED DRIVER WITH SELECTABLE PRE-EMPHASIS SIGNAL LEVELS

## ABSTRACT OF THE DISCLOSURE

A Transmit line driver with selectable pre-emphasis and driver signal magnitudes comprises a primary current driver for setting a primary current level and a pre-emphasis current driver that provides an additional amount of current that is superimposed with or added to the primary current level produced by the primary current driver. The preemphasis current has either negative or positive magnitude based upon a pre-emphasis signal logic state. A first current selection module defines a reference signal that is used to select the primary current driver output signal magnitude in a first current mirror, while a second current selection module is used to define a second reference signal that selects a pre-emphasis current driver signal magnitude in a second current mirror. Logic generates a binary signal to both the first and second current selection modules to select the current levels as well as the pre-emphasis signal.